

# CLCI-1DIMFLV2EX-W

Wireless In-Ceiling 0-10 V Dimmer, 230 Vac  
Installation Guide



## Description

The Crestron® CLCI-1DIMFLV2EX-W is an infinET EX® two-channel 0-10 V dimmer capable of controlling two independent 230 Vac lighting loads, and it can be installed in the ceiling.

CLCI-1DIMFLV2EX-W Specifications

SPECIFICATION	DETAILS
Input Voltage	220 to 240 Vac, 50/60 Hz line power
Load Ratings	
Number of Channels	2
Maximum Load per Channel	2 AX (2 A fluorescent)
Dimmer	0-10 V fluorescent ballast or LED driver; 65 mA max current sink per channel
Switch	Incandescent, tungsten-halogen, magnetic low voltage, electronic low voltage, fluorescent ballast, neon/cold cathode, and motor
Environmental	
Temperature	0° to 40°C (32° to 104°F)
Humidity	10% to 90% RH (noncondensing)
Dimensions	
Height	178 mm (7 in)
Width	55 mm (2.13 in)
Depth	41 mm (1.63 in)

## Additional Resources

Visit the product page on the Crestron website ([www.crestron.com](http://www.crestron.com)) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.



## Important Notes

**CAUTION:** TO REDUCE THE RISK OF OVERHEATING AND POSSIBLE DAMAGE TO OTHER EQUIPMENT, DO NOT INSTALL TO CONTROL A RECEPTACLE OR A TRANSFORMER-SUPPLIED APPLIANCE.

**ATTENTION:** GRADATEURS COMMANDANT UN BALLAST-AFIN DE REDUIRE LE RISQUE DE SURCHAUFFE ET LA POSSIBILITE D'ENDOMMAGEMENT A D'AUTRES MATERIELS, NE PAS INSTALLER POUR COMMANDER UNE PRISE OU UN APPAREIL ALIMENTE PAR UN TRANSFORMATEUR.

**CAUTION:** Observe the following points:

- Install the CLCI-1DIMFLV2EX-W only on 10 A branch circuits.
- Install using wires that are a maximum of 2.5 mm<sup>2</sup> and that comply with BS6004:2000/IEC 60245 and local electrical codes.
- Use the CLCI-1DIMFLV2EX-W with loads that have a power factor greater than 0.95.

**NOTE:** Record the serial number of the device before installation.

Refer to the CLC(I)-SERIES IMPORTANT NOTICE (Doc. 7179) included in the box.

The device must remain in an accessible location when placed into Acquire mode and joined to a gateway.

**LOW VOLTAGE APPLICATIONS NOTE:** Operating a low-voltage circuit with all lamps inoperative or removed may result in current flow in excess of normal levels. To avoid overheating the transformer and premature transformer failure, Crestron recommends:

- Do not operate low-voltage circuits without operative lamps in place.
- Replace burned-out lamps as quickly as possible.
- Use transformers that incorporate thermal protection or fuse transformer primary windings to prevent transformer failure caused by overcurrent.

**NOTE:** Observe the following points:

- Codes: Install in accordance with all local and national electrical codes.
- Wiring: The CLCI-1DIMFLV2EX-W requires a neutral connection to operate.
- Wiring: Use copper wire only. For supply connections, use wires rated at least 75°C.
- Lamp Type: For use with permanently installed incandescent, tungsten-halogen, magnetic low voltage, electronic low voltage, fluorescent ballast, neon/cold cathode, motor, 0-10 V fluorescent, and 0-10 V LED.
- Temperature: For use where temperatures are between 0° to 40°C (32° to 104°F).
- Spacing: If mounting one device above another, leave at least 115 mm (4-1/2 in) vertical space between them.

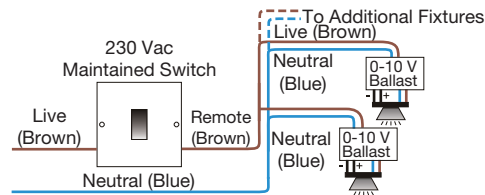
## Wiring

**WARNING:** Turn off the power at the circuit breaker. Wiring with the power on can result in serious personal injury and damage to the device.

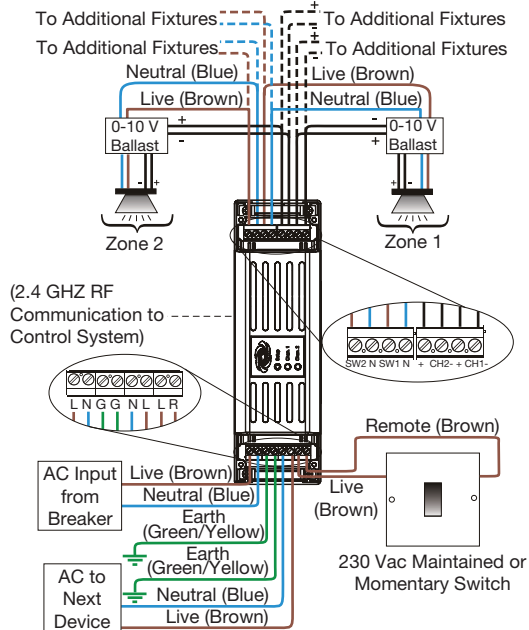
**WARNING:** New installations should be checked for short circuits prior to installing a CLCI-1DIMFLV2EX-W dimmer. With the power off, close the circuit and then restore the power. If the loads do not work or a breaker trips, check and correct the wiring or fixture (if necessary). Install the switch only when the short is no longer present. The warranty is void if the dimmer is installed and operated with a shortened load.

The following describes the wiring for the CLCI-1DIMFLV2EX-W.

Typical Existing Wiring Diagram (without the CLCI-1DIMFLV2EX-W)

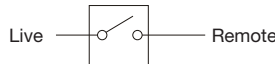


Typical Wiring Diagram (with the CLCI-1SW2EX-W)

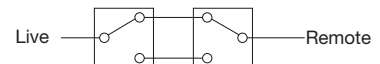


### Remote Switch Wiring Options

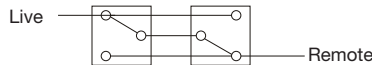
Remote Maintained (Single Switch)



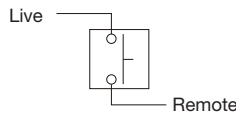
Remote Maintained (Multiway)



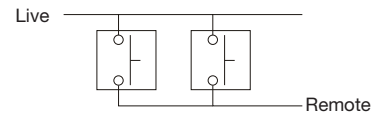
Remote Maintained (Multiway)



Remote Momentary (Single Switch)



Remote Momentary (Multiway)



## Local and Remote Operations

The operation described assumes the device is in Local mode. The device can also operate in Remote mode, where button behavior is dictated by the control system.

Local mode options (available in SIMPL Windows):

- Maintained Switch (Default): The unit toggles on and off when the switch is toggled.
- Momentary Switch:
  - > Single Tap - Both loads toggle on and off.
  - > Double Tap - Initiates a fast-full-on.
  - > Hold - Initiates cycle dimming.

**NOTE:** If one load is on, both turn off. If both loads are off, both turn on.

## Installation

**WARNING:** To avoid fire, shock, or death, turn off the power at the circuit breaker or fuse and test that the power is off before wiring!

**NOTES:** Observe the following points:

- This product must be installed and used in accordance with appropriate electrical codes and regulations.
- This product must be installed by a licensed electrician.

**NOTE:** Before using the CLCI-1DIMFLV2EX-W, ensure the device is using the latest firmware. Check for the latest firmware for the CLCI-1DIMFLV2EX-W at [www.crestron.com/firmware](http://www.crestron.com/firmware). Firmware is loaded onto the device using Crestron Toolbox™.

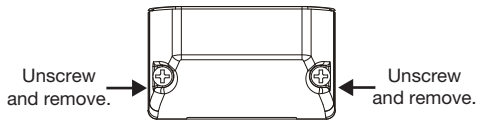
Complete the following to install a CLCI-1DIMFLV2EX-W dimmer.

1. Turn off the power at the main circuit breaker.

**WARNING:** The device should be mounted in a well-ventilated and dry area.

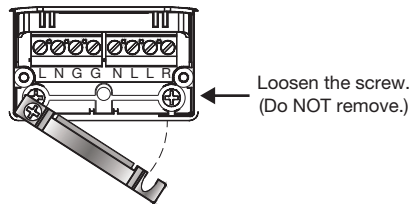
2. Identify the installation location for the CLCI-1DIMFLV2EX-W.
3. Identify and tag the live, switched live, and neutral wires.
4. Remove the end caps from the device by unfastening the two screws shown.

*Removing the end caps*



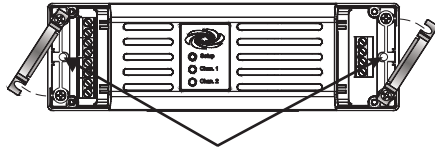
5. Loosen the strain relief clamp screw and rotate the clamp to the side for wiring.

*Rotating the strain relief clamp*



6. To mount the device (optional), use two M3 X .05 screws (not supplied).

*Mounting Screw Locations*



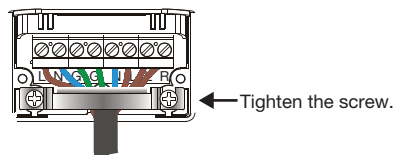
Mounting Screw Locations

7. Wire the device as shown in the illustration in the "Wiring" section.

**CAUTION:** Use with wires that are a maximum of 2.5 mm<sup>2</sup>.

8. Tuck the wires under the strain relief clamps, and tighten the clamp screws.

*Fastening the strain relief clamp*



9. Replace the end caps.
10. With the device still accessible, turn on the main circuit breaker.
11. Acquire the device to the gateway (refer to "Wireless Communications").

## Wireless Communications

The device connects to the Crestron network via the infiNET EX communications protocol. Use the procedures outlined below to join or leave an infiNET EX network and to verify communications between the device and the control system.

## Joining an infiNET EX Network

Before a device can be used in a lighting system, it must first join an infiNET EX network. To join an infiNET EX network, the device must be acquired by an infiNET EX gateway.

**NOTE:** A device can be acquired by only one gateway.

1. Put the infiNET EX gateway into Acquire mode from the unit itself or from Crestron Toolbox. Refer to the gateway's manual at [www.crestron.com/manuals](http://www.crestron.com/manuals) for details.

**NOTE:** In an environment where multiple gateways are installed, only one gateway should be in Acquire mode at any time.

2. Put the device into Acquire mode.
  - a. Tap the Setup button three times and then press and hold it down (tap-tap-tap-press+hold) until the Chan. 1 and Chan. 2 LEDs on the device blink once (this can take up to 10 seconds).
  - b. Release the button to start the acquire process. Chan. 1 LED and the attached load will blink slowly to show that the device is actively scanning the infiNET EX network.

**NOTE:** The acquire process can also be initiated by a remote maintained switch (if equipped) by flipping the switch four times rapidly or by tapping the remote momentary switch (if equipped) four times rapidly. The Chan. 1 LED and attached load will blink (this can take up to 10 seconds).

- Chan. 1 LED and load turn on for 5 seconds to show that the device has been successfully acquired by the infiNET EX network. The load will then turn on.
  - If the device fails to acquire, the Chan. 1 LED and load will flash rapidly until a button is pressed. The load will then turn off. Ensure the gateway is in Acquire mode and within range before attempting the acquire process again.
3. Once all devices have been acquired, take the gateway out of Acquire mode. Refer to the gateway's manual for details.

## Leaving an infiNET EX Network

To leave an infiNET EX network, put the device into Acquire mode, as described in "Joining an infiNET EX Network" above, when no gateway is in Acquire mode.

## Verifying Communications Status

To check the communications status of the device, tap the Setup button three times and then press and hold it down (tap-tap-tap-press+hold) for up to 2 seconds. The Chan. 1 LED blinks to indicate the communications status. Refer to the following table for details.

LED	COMMUNICATIONS STATUS
Turns on for 5 seconds	The device is communicating with the control system.
Blinks three times	The device is communicating with the gateway, but the gateway is not communicating with the control system.
Blinks twice	The device was previously joined to the network but is not communicating with the gateway.
Blinks once	The device is not joined to the network.

## Troubleshooting

The following table provides corrective actions for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

CLCI-1DIMFLV2EX-W

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The unit does not function.	The device is not receiving line power.	Verify that the dimmer is properly connected to the power line and the neutral. Verify that the circuit breaker is closed.
	The device is in Remote mode.	Check the SIMPL program to determine or change the operating mode.
	All attached lamps have burned out.	Replace all of the burned-out lamps.
The dimmer is operating improperly.	The device is not communicating with the gateway.	Use the Crestron Toolbox to poll the network. Verify network connection to the device.
	0-10 V is not wired correctly.	Check the wiring polarity to all attached loads.

This product is Listed to applicable IEC Standards and requirements.



The product warranty can be found at [www.crestron.com/warranty](http://www.crestron.com/warranty).

The specific patents that cover Crestron products are listed at [patents.crestron.com](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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This document was written by the Technical Publications department at Crestron.

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**Installation Guide - DOC. 6953B**  
**(2028303)**  
**09.15**

Specifications subject to change without notice.